# KENWOOD

# KDV-MP7032

DVD-RECEIVER
# INSTRUCTION MANUAL

RECEPTOR DVD
# MANUAL DE INSTRUCCIONES

RECEPTOR DVD
# MANUAL DE INSTRUÇÕES

Kenwood Corporation

# *Contents*

# *Before use*

**WARNING**

## To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- DO NOT operate the unit while driving. If you need to operate the unit while driving, be sure to look around carefully.

## How to reset your unit

- If the unit fails to operate properly, press the Reset button. The unit returns to factory settings when the Reset button is pressed.


Reset button
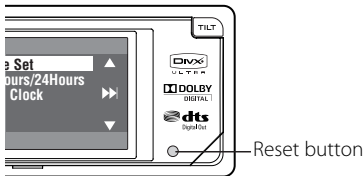
## How to forcibly eject a disc
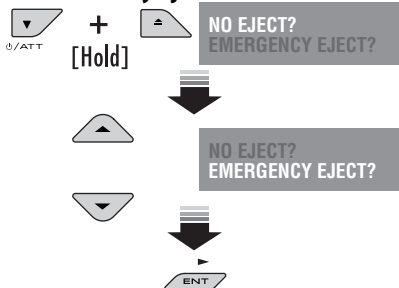


## Cautions on the monitor

- The monitor built in this unit has been produced with high precision, but it may have some ineffective dots. This is inevitable and is not malfunction.
- Do not expose the monitor to direct sunlight.
- When the temperature is very cold or very hot.
  - Chemical changes occur inside, causing malfunction.
  - Pictures may not appear clearly or may move slowly. Pictures may not be synchronized with the sound or picture quality may decline in such environments.

## Cleaning the Unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth.
If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.

⚠

- Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases characters.

## Cleaning the Faceplate Terminals

If the terminals on the unit or faceplate get dirty, wipe them with a clean soft dry cloth.

## Lens Fogging

When you turn on the car heater in cold weather, dew or condensation may form on the lens in the disc player of the unit. Called lens fogging, this condensation on the lens may not allow discs to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.

## Notes

- If you experience problems during installation, consult your Kenwood dealer.
- When you purchase optional accessories, check with your Kenwood dealer to make sure that they work with your model and in your area.
- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may be inapplicable.
- If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

## Handling discs

- Do not touch the recording surface of the disc.
- Do not stick tape etc. on the disc, or use a disc with tape stuck on it.
- Do not use disc type accessories.
- Clean from the center of the disc and move outward.
- When removing discs from this unit, pull them out horizontally.
- If the disc center hole or outside rim has burrs, use the disc only after removing the burrs with a ballpoint pen etc.

## Discs that cannot be used

- Discs that are not round cannot be used.
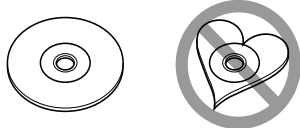


- Discs with coloring on the recording surface or discs that are dirty cannot be used.
- This unit can only play the CDs with ![disc logos]. This unit may not correctly play discs which do not have the mark.
- You cannot play a CD-R or CD-RW that has not been finalized. (For the finalization process refer to your CD-R/CD-RW writing software, and your CD-R/CD-RW recorder instruction manual.)

## About DivX

DivX is a popular media technology created by DivX, Inc. DivX media Files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

## About DivX Certified

DivX Certified products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, including DivX 6. Certified products qualify for one of several DivX Profiles that designate the type of video the product supports, from compact portable video to high-definition video.

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Manufactured under license under U.S. Patent #: 5,451,942 & other U.S. and worldwide patents issued & pending. DTS and DTS Digital Out are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.

**DVD** is a trademark of DVD Format/Logo Licensing Corporation registered in the U.S., Japan and other countries.

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

DivX, DivX Ultra Certified, and associated logos are trademarks of DivX, inc. and are used under license.

Official DivX® Ultra Certified product

Plays all versions of DivX® video (including DivX® 6) with enhanced playback of DivX® media files and the DivX® Media Format

Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

**The marking of products using lasers (Except for some areas)**

**CLASS 1
LASER PRODUCT**

The label is attached to the chassis/case and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

# Playable disc type

| Disc type | Recording format, file type, etc. | Playable |
|---|---|---|
| **DVD** | DVD Video (Region Code: 4)*1 (ALL) (4) (3 4) (1 2 3 4) | ✓ OK |
| | DVD Audio | ✗ NO |
| | DVD-ROM | |
| **DVD Recordable/Rewritable (DVD-R**\*2**/-RW, +R/+RW**\*3**)** <br> • Compliant to UDF bridge format <br> • DVD-RAM cannot be played. | DVD Video | ✓ OK |
| | DivX/MPEG1/MPEG2 | |
| | JPEG | |
| | MP3/WMA/WAV | |
| | MPEG4 | ✗ NO |
| | DVD-VR, +VR | |
| **Dual Disc** | DVD side | ✓ OK |
| | Non-DVD side | ✗ NO |
| **CD/VCD** | Audio CD/CD Text (CD-DA) | ✓ OK |
| | VCD (Video CD) | |
| | DTS-CD*4 | ✗ NO |
| | CD-ROM | |
| | CD-I (CD-I Ready) | |
| **CD Recordable/Rewritable (CD-R/-RW)** <br> • Compliant to ISO 9660 level 1, level 2, Romeo, Joliet | CD-DA | ✓ OK |
| | MP3/WMA/WAV | |
| | JPEG | |
| | DivX/MPEG1/MPEG2 | |
| | MPEG4 | ✗ NO |

*1 *If you insert a DVD Video disc of an incorrect Region Code, "Region code error" appears on the monitor.*

*2 *DVD-R recorded in multi-border format is also playable (except for dual layer discs).*

*3 *It is possible to play back finalized +R/+RW (Video format only) discs. However, the use of +R double layer disc is not recommended.*

*4 *To reproduce DTS sound, use the digital connection. (☞ Installation/Connection Manual)*

• "DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.

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**Caution for DualDisc playback**
The Non-DVD side of a "DualDisc" does not comply with the "Compact Disc Digital Audio" standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

**Notes on reproduced sound (☞ page 38)**
Through the analog terminals (Speaker out/LINE OUT) of this unit...
• Multi-channel signals are downmixed.
• DTS sound cannot be reproduced.

# *Before operating the unit*

Cancel the display demonstration and set the clock. (☞ also pages 28 and 29)

**Indication language: In this manual, English indications are used for purpose of explanation. You can select the indication language on the monitor. (☞ page 29)**
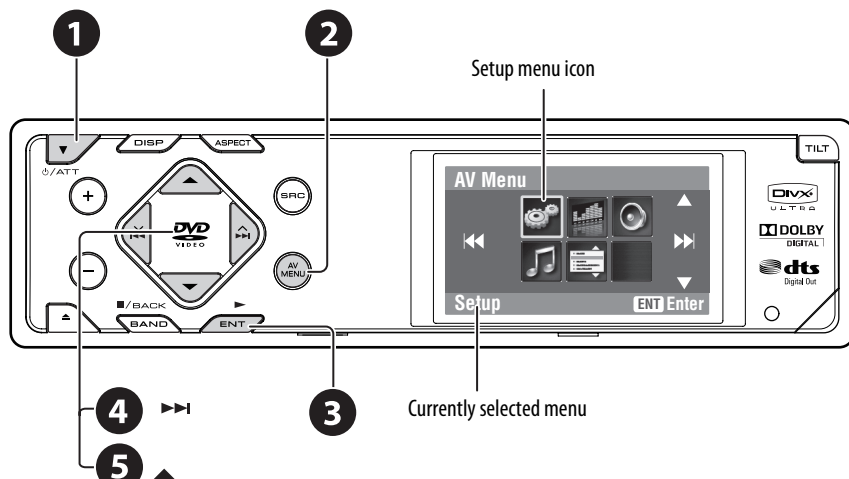


Setup menu icon

Currently selected menu

❶ **Turn on the power.**

❷ **Display <AV Menu>.**

❸ **Enter the <Setup> menu.**

❹ **Select <Display> ⇨ <Demonstration>, then activate the <Demonstration> screen.**



Currently selected submenu     Current setting
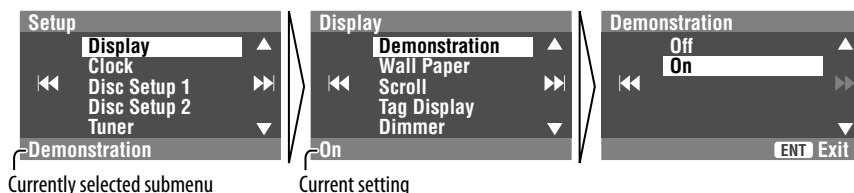
❺ **Cancel the display demonstrations.**

Select <**Off**>.
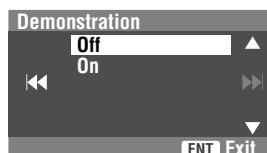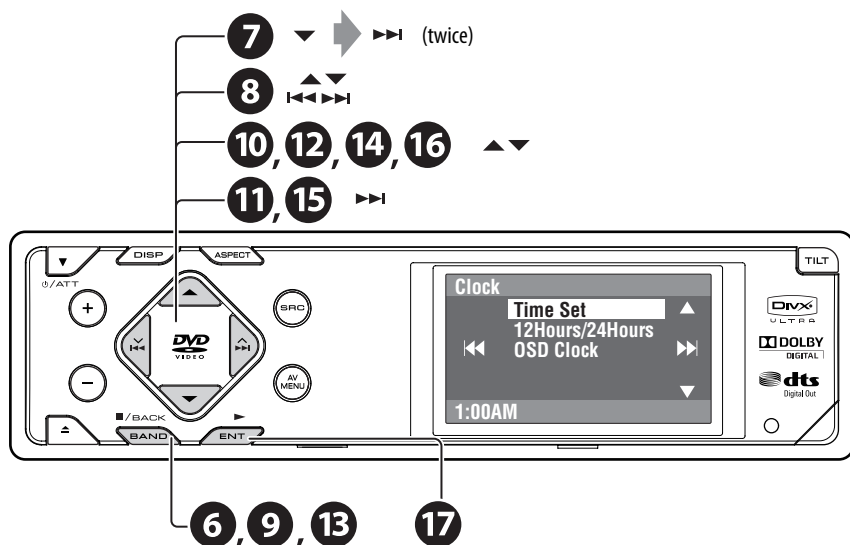
**❻** Return to the <Setup> menu.

**❼** Select <Clock> ⇨ <Time Set>, then activate the <Time Set> screen.
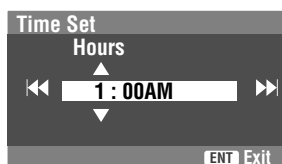
**❽** Set the clock time.



**❾** Return to the <Clock> menu.

**❿** Select <12Hours/24Hours>.

**⓫** Activate the <12Hours/24Hours> screen.

**⓬** Select either the 12-hour or 24-hour system.
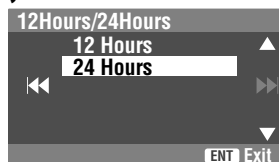


**⓭** Return to the <Clock> menu.

**⓮** Select <OSD Clock>.

**⓯** Activate the <OSD Clock> screen.

**⓰** Select the <OSD Clock> setting.
- **Off:** The clock time is not displayed while playing back a video source.
- **On:** The clock time is displayed while playing back a video source.

**⓱** Finish the procedure.

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# *Basic operations* — *Control panel*

- **Turn on the power.**
- **Turn off the power** [Hold]**.**
- **Attenuate the sound (if the power is on).**

**Select the source.**
**TUNER → DISC (DVD/VCD/CD), →**
**AV-IN →**(back to the beginning)
- You cannot select these sources if they are not ready.

**Change the aspect ratio.**

**Display or erase <AV Menu>**\*1**.**

**Change the control panel tilt (Tilt1 – Tilt4).**

**Change the display information.**

**Display window**

**Adjust the volume.**

**Eject the disc.**

**Remote sensor**

**Reset the unit.**
- Use only when the internal system malfunctions.

**Detach the control panel**\*2**.**
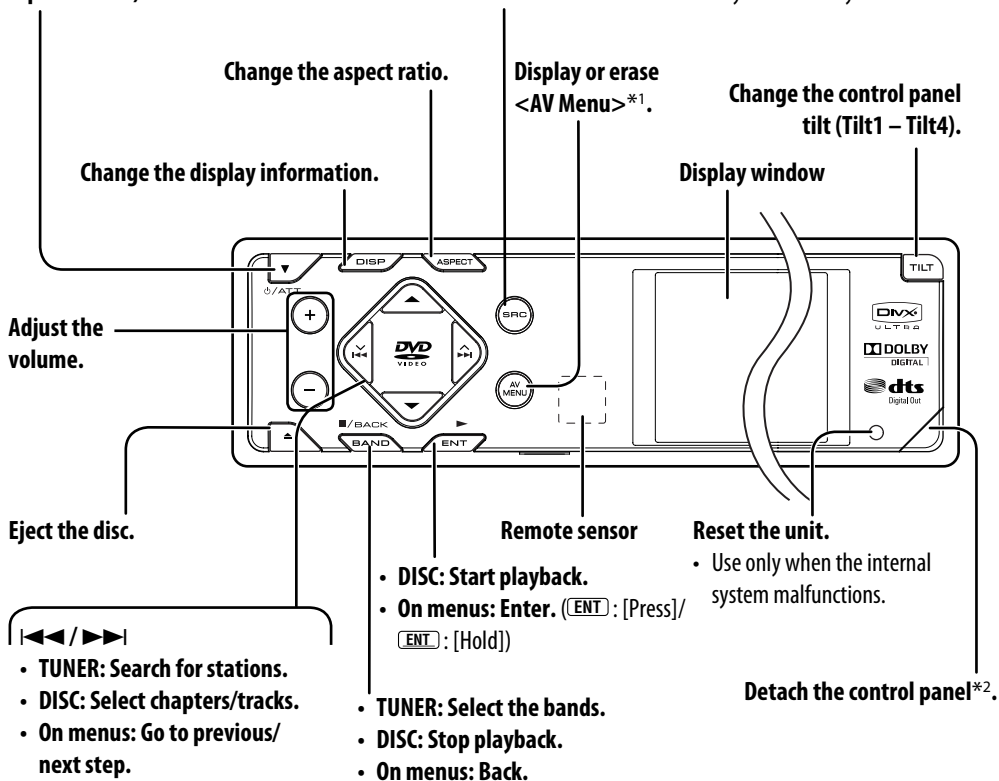
**|◄◄ / ►►|**
- **TUNER: Search for stations.**
- **DISC: Select chapters/tracks.**
- **On menus: Go to previous/ next step.**

**▲ / ▼**\*3
- **TUNER: Select preset stations.**
- **DISC: Select titles/folders.**
- **On menus: Select items.**

- **DISC: Start playback.**
- **On menus: Enter.** ( ENT : [Press]/ ENT : [Hold])

- **TUNER: Select the bands.**
- **DISC: Stop playback.**
- **On menus: Back.**

\*1 **<AV Menu> screens**
You can use the menus to set up various settings.
The <**AV Menu**> screen consists of the following sub-menus—
**Setup/Equalizer/Sound/Mode/List**.
- For details, see page 27.

\*2 **To attach the control panel**
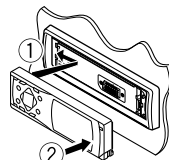
\*3 By holding ▲ / ▼, you can display the list accessible for the selected source.

English | 9

# *Basic operations* — *Remote controller*

## Installing the lithium coin battery (CR2025)



CR2025
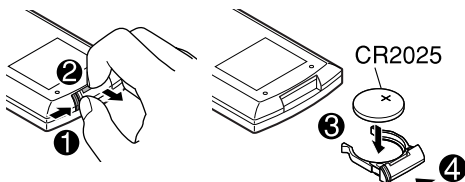
If the range of effectiveness of the remote controller decreases, replace the battery.

### For USA-California Only

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material—special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate

### Before using the remote controller:

- Aim the remote controller directly at the remote sensor on the unit.
- DO NOT expose the remote sensor to bright light (direct sunlight or artificial lighting).

The unit is equipped with the steering wheel remote control function.
- See the Installation/Connection Manual (separate volume) for connection.

### Warning:
### To prevent accidents and damage

- Do not install any battery other than CR2025 or its equivalent.
- Store the battery in a place where children cannot reach.
- Do not recharge, short, disassemble, or heat the battery or dispose of it in a fire.
- Do not leave the battery with other metallic materials.
- Do not poke the battery with tweezers or similar tools.
- Wrap the battery with tape and insulate when throwing away or saving it.

## Main elements and features
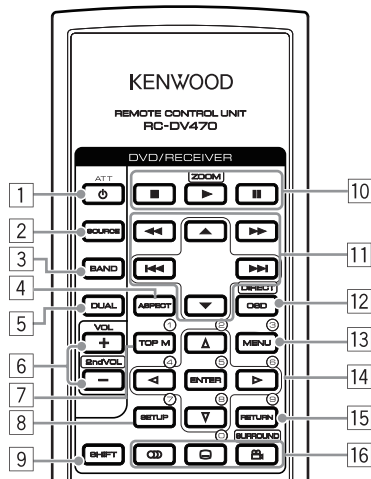


1. • Turns on the power.
   • Attenuates the sound if the power is on.
   • Turns off the power if pressed and held (while the power is on).
2. Selects the source.
3. Selects the FM/AM, and satellite radio bands.
4. Changes the aspect ratio of the playback pictures.
5. Not used for this unit.
6. Adjusts the volume level.
   • Not used as 2nd VOL button for this unit.
7. [*1] • DVD/DivX 6: Shows the disc menu.
   • VCD: Resumes PBC playback (☞ page 21).
8. [*1] Not used as SETUP button for this unit.
9. SHIFT button

10 ■ (stop), ► (play), ❚❚ (pause)
- ► (play) also functions as ZOOM button when pressed with SHIFT button (☞ page 22).

11 **For advanced disc operations:**
- ▲ / ▼
  DVD: Selects the titles.
  Other discs except VCD/CD: Selects the folders.
- ◄◄ / ►►❙:
  Press briefly: reverse skip/forward skip
  Press and hold: reverse search/forward search
- ◄◄ / ►►: reverse search/forward search

  **For FM/AM operations:**
- ▲ / ▼: Changes the preset stations.
- ◄◄ / ►►❙:
  – Functions to search for stations.
    Press briefly: Auto Search
    Press and hold: Manual Search

12 Shows the on-screen bar.
- Also functions as DIRECT button when pressed with SHIFT button. (☞ pages 20 and 21)

13 *1 • DVD/DivX 6: Shows the disc menu.
- VCD: Resumes PBC playback. (☞ page 21)

14 *1 • Makes selection/settings.
- ◁▷: Skips back or forward by 5 minutes for DivX/MPEG1/MPEG2.

15 *1 RETURN button

16 • DVD: Selects audio language (⟅⟆ ), subtitles (⟦...⟧), angle (⟦⟧)*2.
- DivX: Selects audio language (⟅⟆ ), subtitles (⟦...⟧).
- VCD: Selects audio channel (⟅⟆ ).

*1 *Functions as number buttons when pressed with SHIFT button.*
  – *TUNER: Selects preset station.*
  – *DISC: Selects chapter/title/folder/track.*
*2 *Not used as SURROUND button for this unit.*

# *Listening to the radio*

POWER⇒ON

Band     Preset No.     ☞ page 25

TUNER                    FLAT

FM1  Preset1
📡 ABC Radio
∿  87.5 MHz

MO | DX | 3: 45ᴾᴹ

Tuner indicators

Assigned station name
(☞ page 26). If no name
is assigned, "No Name"
appears.

❶ **Select "TUNER".**

❷ **Select the bands.**

⟶ FM1 ⟶ FM2 ⟶ FM3 ⟶ AM ⟶

❸ **Search for a station—Auto Search.**

- Manual Search: Hold either I◄◄ or ►►I until "Manual Search" appears on the display, then press it repeatedly.
- The ST indicator lights up when receiving an FM stereo broadcast with sufficient signal strength.

## When an FM stereo broadcast is hard to receive

**1**

AV Menu

Setup          ENT Enter

**2**

AV Menu

Mode          ENT Enter

Mode menu icon

**3**

Mode
Mono
DX/Local
SSM
Title Entry
Off

**4**

Mono
Off
On

ENT Exit
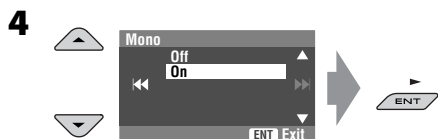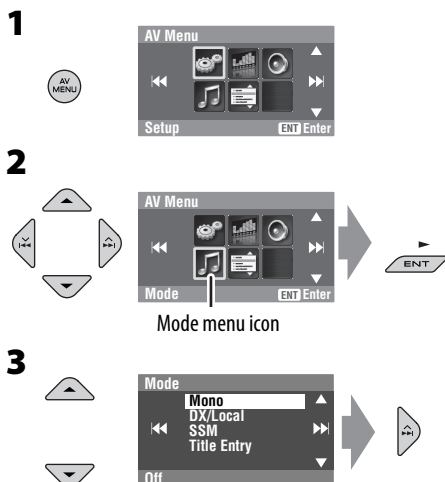
Reception improves, but stereo effect will be lost.

- The MO indicator lights up.

**To restore stereo effect,** select <**Off**> in step **4**.

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## Tuning in to stations with sufficient signal strength

This function works only for FM bands.
Once you have activated this function (selected <**Local**>), it always works when searching for FM stations.

**1**

AV Menu

Setup          ENT Enter

**2**

AV Menu

Mode          ENT Enter

Mode menu icon

**3**

Mode
Mono
DX/Local
SSM
Title Entry

DX

**4**

DX/Local
DX
Local

ENT Exit
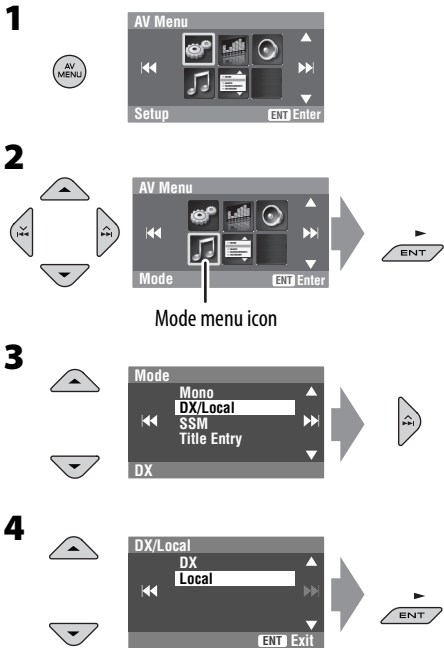
Only stations with sufficient signal strength will be detected.

• The DX indicator goes off, then the LO indicator lights up.

## FM station automatic presetting —SSM (Strong-station Sequential Memory)

This function works only for FM bands.
You can preset six stations for each band.

**1**

AV Menu

Setup          ENT Enter

**2**

AV Menu

Mode          ENT Enter

Mode menu icon

**3**

Mode
Mono
DX/Local
SSM
Title Entry

ENT Start
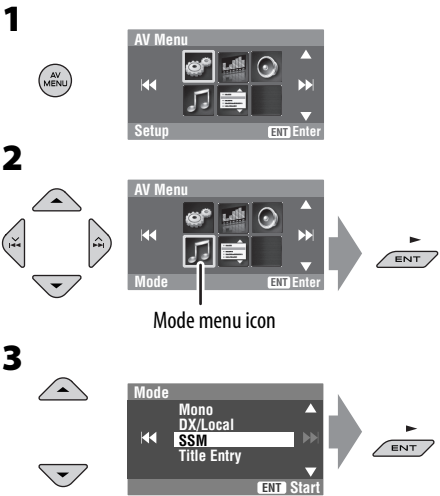
Local FM stations with the strongest signals are searched and stored automatically in the FM band.

## Manual presetting

Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.

**1**

■/BACK
BAND ● → FM1 → FM2 → FM3 → AM ⌐

**2** **Tune in to a station you want to preset.**

|◀◀ | ▶▶|

☆ No Name
∧ 92.5 MHz

**3**

△

▽
[Hold]

| FM1 | Store ENT |
| 1 87.5 | ▲ |
| 2 89.9 | |
| ◀◀ 3 97.9 | ▶▶ |
| 4 105.9 | |
| 5 108.0 | ▼ |
| 6 107.9 | ENT |

Preset List appears.*

**4** **Select a preset number.**

△

▽

| FM1 | Store ENT |
| 1 87.5 | ▲ |
| 2 89.9 | |
| ◀◀ 3 97.9 | ▶▶ |
| 4 105.9 | |
| 5 108.0 | ▼ |
| 6 107.9 | ENT |

**5**

►
ENT
[Hold]

TUNER ▲▲▲▲ FLAT
FM1 ▷Preset4◁
☆ No Name
∧ 92.5 MHz
DX 3:45ᴾᴹ
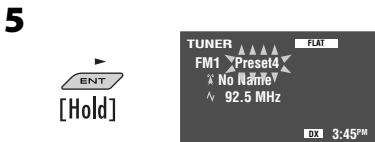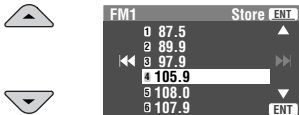
The station selected in step **2** is now stored in preset number 4.

---

* Each time you hold the button, you can change the FM bands.
• Preset List can also be accessed through <**AV Menu**> → <**List**>. (☞ right)

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## Selecting preset stations

### On the remote:

**1**

BAND ● → FM1 → FM2 → FM3 → AM ⌐

**2**

① ② ③
TOP M | △ | MENU
SHIFT +
[Hold] ④ ⑤ ⑥
◁ | ENTER | ▷

or

△ | ▽

### On the unit:

△

■/BACK
BAND

▽

or

**1**

■/BACK
BAND

△

▽
[Hold]

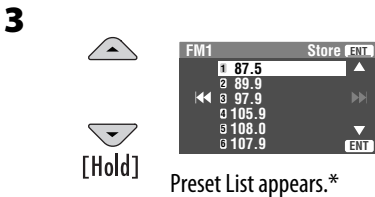| FM1 | Store ENT |
| 1 87.5 | ▲ |
| 2 89.9 | |
| ◀◀ 3 97.9 | ▶▶ |
| 4 92.5 | |
| 5 108.0 | ▼ |
| 6 107.9 | ENT |

• Each time you hold the button, you can change the FM bands.

**2**

△

| FM1 | Store ENT |
| 1 87.5 | ▲ |
| 2 89.9 | |
| ◀◀ 3 97.9 | ▶▶ |
| 4 92.5 | |
| 5 108.0 | ▼ |
| 6 107.9 | ENT |

▽

►
ENT

---

• Preset List can also be accessed through <**AV Menu**> → <**List**>.

AV
MENU

AV Menu
|◀◀ ▶▶|
Setup ENT Enter

△

|◀ ▷|

▽

AV Menu
|◀◀ ▶▶|
List ENT Enter

►
ENT

List menu icon

# *Disc operations*

The disc type is automatically detected, and playback starts automatically (for some discs: automatic start depends on its internal program).

If a disc does not have any disc menu, all tracks in it will be played repeatedly until you change the source or eject the disc.

If "⊘" appears on the monitor, the unit cannot accept the operation you have tried to do.
• In some cases, without showing "⊘", operations will not be accepted.

**Insert the disc.**
Playback starts automatically.

Label side
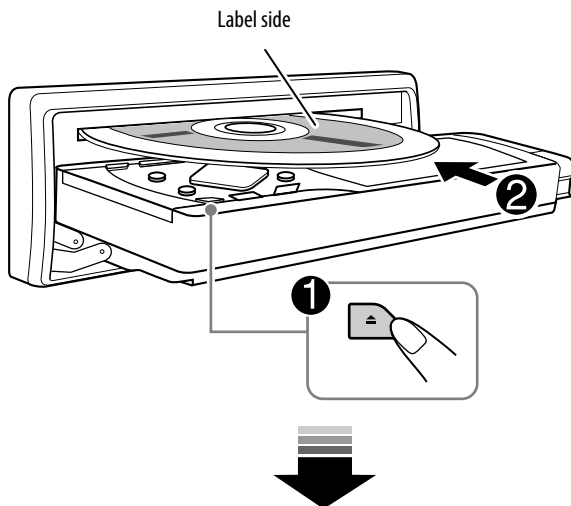
**Caution:**

Do not place your finger behind the control panel.

**Caution on volume setting:**

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

**DISP**: Press if no playback picture appears, but disc information (☞ pages 16 and 17) screen is displayed.



▲: Eject the disc.
■: Stop playback.
▶: Start playback if necessary.
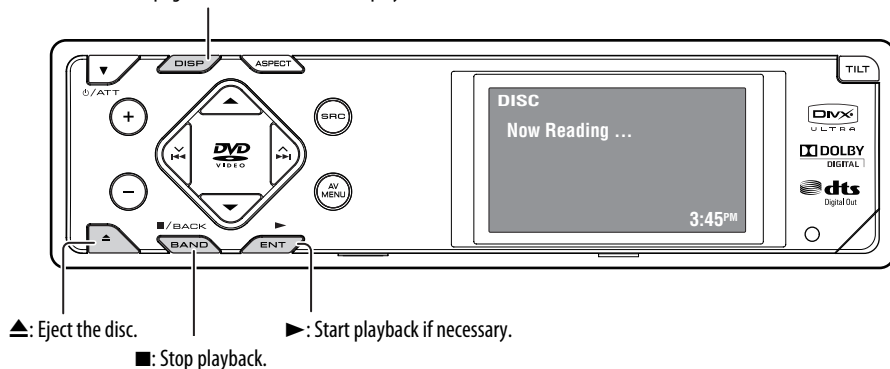
While playing the following discs, press ⏹ DISP .
- Each time you press the button, playback picture and disc information screens appear alternately.
- For discs except DVD and VCD: The control screen appears on the connected external monitor. (☞ page 37)

**DVD Video**

Disc type          Audio format          ☞ page 25

| DISP | ASPECT | ... | TILT |

```
DVD   VIDEO  ⫶⫶ DIGITAL  FLAT
T01  C02      0:45:38



CHAP. RPT  3:45PM
```

DivX ULTRA
DOLBY DIGITAL
dts Digital Out

⏮ ⏭ *Press*: Select chapter
      *Hold*: Reverse/forward search*[1]
▲ ▼  *Press*: Select title

Playback mode
Title no./Chapter no./Playing time

**DivX / MPEG / JPEG**

☞ page 25

```
CD    DivX         FLAT
□01  ⊟02    0:45:38
□ Current Folder Name
⊟ Current File Name.avi
            □ RPT  3:45PM
```

DivX ULTRA
DOLBY DIGITAL
dts Digital Out

⏮ ⏭ *Press*: Select track
      *Hold*: Reverse/forward search for DivX/MPEG*[2]
▲ ▼  *Press*: Select folder
      *Hold*: Display Folder List

For DivX/MPEG: Folder no./Track no./Playing time
For JPEG: Folder no./Track no.

**VCD**

☞ page 25

```
VCD   PBC          FLAT
♪01      0:45:38



            3:45PM
```

DivX ULTRA
DOLBY DIGITAL
dts Digital Out

⏮ ⏭ *Press*: Select track
      *Hold*: Reverse/forward search*[1]

PBC indicator
lights up when PBC is in use.

Track no./Playing time

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**CD**

☞ page 25

|◄◄ ►►| *Press*: Select track
*Hold*: Reverse/forward search*[1]

Disc title/Artist name/Track title (only for CD Text)*[3]

Track no./Playing time

**MP3/ WMA/WAV**

Audio format (MP3/WMA/WAV)

☞ page 25
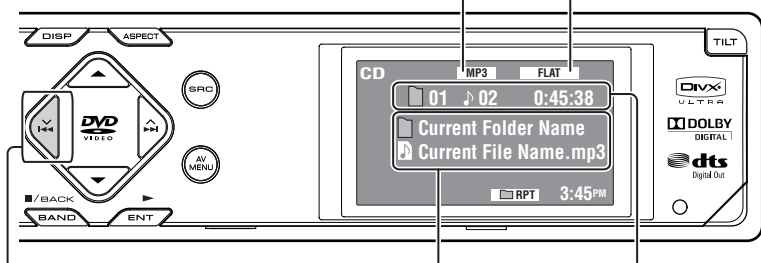
|◄◄ ►►| *Press*: Select track
*Hold*: Reverse/forward search*[1]

▲ ▼ *Press*: Select folder
*Hold*: Display Folder List

*[4]

Folder no./Track no./Playing time

*[1] *Search speed: x2 ⇨ x10.*

*[2] *Search speed: ►►1 ⇨ ►►2.*

*[3] *"No Name" appears for conventional CDs.*

*[4] *Tag data will be shown instead of folder/file names when they are recorded and <**Tag Display**> is set to <**On**>. (☞ page 28)*

English | 17

# Selecting playback modes

You can use only one of the following playback modes—Intro/Repeat/Random.
Ex. To select Track Repeat

**1**

AV Menu

Setup    ENT Enter

**2**

AV Menu

Mode    ENT Enter

Mode menu icon

**3**

Mode
All Off
Intro
Repeat
Random
Off

**4**

Repeat
Off
Track
Folder
ENT Set

When one of the playback modes is selected, the corresponding indicator lights up on the disc information screen.

**To cancel,** select <**All Off**> in step **3** or <**Off**> in step **4**.

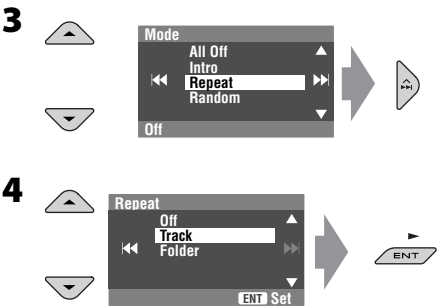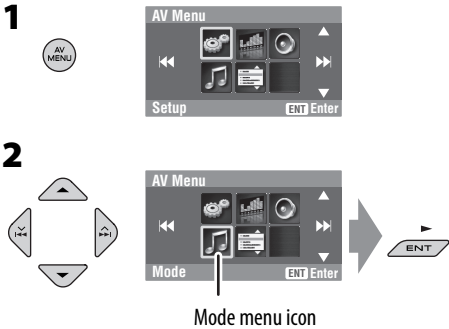| Disc type | Intro | Repeat | Random |
|---|---|---|---|
| **DVD** Video | — | **Chapter:** Repeats current chapter<br>**Title:** Repeats current title | — |
| **VCD** **CD** | **Track:** Plays the first 15 seconds of each track (for VCD: PBC not in use) | **Track:** Repeats current track (for VCD: PBC not in use) | **Disc:** Randomly plays all tracks (for VCD: PBC not in use) |
| **MP3/ WMA/WAV** | **Track:** Plays the first 15 seconds of each track<br>**Folder:** Plays the first 15 seconds of the first track of each folder | **Track:** Repeats current track<br>**Folder:** Repeats all tracks of the current folder | **Folder:** Randomly plays all tracks of current folder, then tracks of next folders<br>**Disc:** Randomly plays all tracks |
| **DivX** **MPEG** | — | **Track:** Repeats current track<br>**Folder:** Repeats current folder | — |
| **JPEG** | — | **Folder:** Repeats current folder | — |

## Selecting tracks on the list

If a disc includes folders, you can display the Folder/Track (File) Lists, then start playback.

**1**
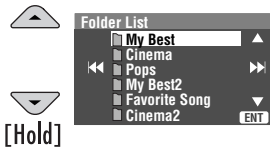


[Hold]

Folder List appears.
- Hold the button to see the next/previous folders.

**2** **Select a folder, then activate the Track List.**
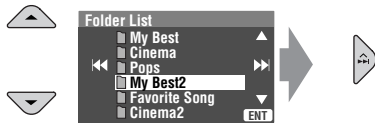


Track List of the selected folder appears.

**3** **Select a track, and start playing.**



---
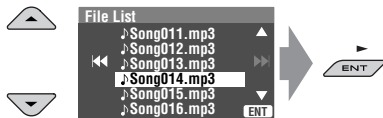
- Folder List can also be accessed through <**AV Menu**> → <**List**>.



List menu icon

## Prohibiting disc ejection

You can lock a disc in the loading slot.



**NO EJECT?**
EMERGENCY EJECT?

"No Eject" appears.
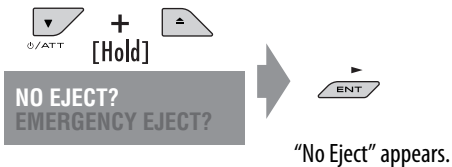
**To cancel the prohibition,** repeat the same procedure to select "EJECT OK?".

# Operations using the remote controller



**KENWOOD**
REMOTE CONTROL UNIT
RC-DV470

DVD/RECEIVER

**DVD**
**Video**

■ : Stop playback.
Ⅱ : Pause (Frame by frame playback if pressed during pause).
▶ : Start playback.
◄◄ ▶▶ :
 Reverse/forward search*1. (No sound can be heard.)
 (Slow motion*2 during pause. No sound can be heard.)
I◄◄ ▶▶I :
 *Press*: Select chapter (within the same title, during play or pause).
 *Hold*: Reverse/forward search*3
▲ ▼ : Select title (during play or pause).
ASPECT : Select aspect ratio.
⌨ : Select subtitle language.
⌨ : Select audio language.
⌨ : Select view angle.

DIRECT
SHIFT +( OSD → ⊙...⊜ ) → ENTER :
 Select chapter (during play or pause).
 Select title (when not playing).

DIRECT    DIRECT
SHIFT +( OSD → OSD → ⊙...⊜ ) → ENTER :
 Select title (during play or pause).

**Using menu driven features...**
1  TOP M  MENU
2  Select an item you want to start play.
   Δ  ▽  ◁  ▷
3  ENTER

---

■ : Stop playback.
Ⅱ : Pause (Frame by frame playback if pressed during pause).
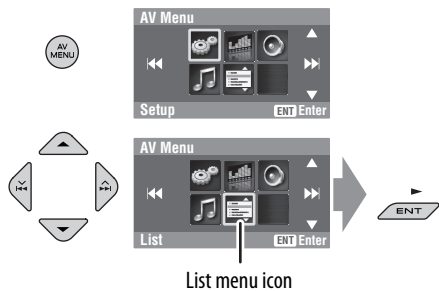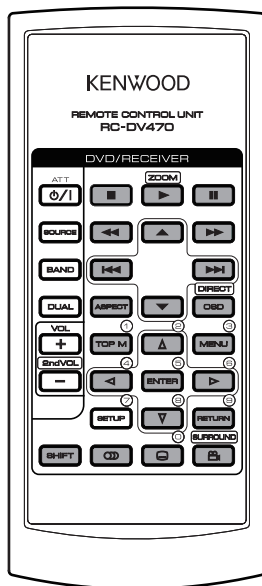▶ : Start playback.
◄◄ ▶▶ : Reverse/forward search*4. (No sound can be heard.)
I◄◄ ▶▶I : *Press*: Select track.
 *Hold*: Reverse/forward search*5. (No sound can be heard.)
▲ ▼ : Select folder.
ASPECT : Select aspect ratio.
⌨ : Select subtitle language. (DivX only)
⌨ : Select audio language. (DivX only)

DIRECT
SHIFT +( OSD → ⊙...⊜ ) → ENTER :
 Select track (within the same folder).

**DivX    MPEG**

**For DivX 6: Using menu driven features...**
1  TOP M  MENU
2  Select an item you want to start play.
   Δ  ▽  ◁  ▷
3  ENTER

**While playing...**
◁ ▷ : Return/advance the scenes by 5 minutes.

Current playback position

| ◁ | | ▷ |

0'00"    5'00"    10'00"    15'00"    20'00"    24'00"
2nd press          1st press          3rd press
         1st press          2nd press
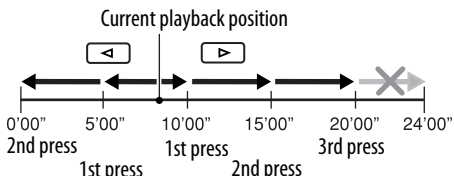
■ : Stop playback.
Ⅱ : Shows the current file until you change it.
► : Start playback (Slide show: each file is shown for a few seconds.).
|◄◄ ►►| : Select track.
▲ ▼ : Select folder.
ASPECT : Select aspect ratio.

**JPEG**

$\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$ :
Select track (within the same folder).

---

■ : Stop playback.
Ⅱ : Pause (Frame by frame playback if pressed during pause).
► : Start playback.
◄◄ ►► :
    Reverse/forward search*1. (Forward slow motion*2 during pause. No sound can be heard.)
    • Reverse slow motion does not work.
|◄◄ ►►| :
    *Press*: Select track.
    *Hold*: Reverse/forward search*3. (No sound can be heard.)
ASPECT : Select aspect ratio.
◯◯ : Select audio channel (ST: stereo, L: left, R: Right).

**VCD**

$\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$ :
Select track.

**During PBC playback...**

$\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$ :
Select an item on the menu.
• To return to the previous menus, press RETURN.
**To cancel PBC playback**
1 ■
2 $\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$
    • To resume PBC, press TOP M / MENU

---

■ : Stop playback.
Ⅱ : Pause.
► : Start playback.
◄◄ ►► : Reverse/forward search*1.
|◄◄ ►►| : *Press*: Select tracks.
        *Hold*: Reverse/forward search*3.
▲ ▼ : Select folder.

**MP3/ WMA/WAV**

$\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$ :
Select track (within the same folder).

---

■ : Stop playback.
Ⅱ : Pause.
► : Start playback.
◄◄ ►► : Reverse/forward search*1.
|◄◄ ►►| : *Press*: Select track.
        *Hold*: Reverse/forward search*3.
$\boxed{\text{SHIFT}} + (\boxed{\overset{\text{DIRECT}}{\text{OSD}}} \rightarrow \odot ... \ominus ) \rightarrow \boxed{\text{ENTER}}$ : Select track.

**CD**

*1 *Search speed: x2 ⇨ x5 ⇨ x10 ⇨ x20 ⇨ x60*
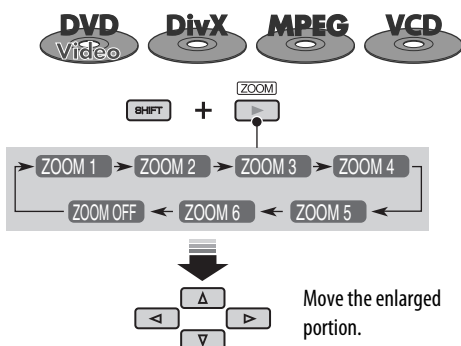*2 *Slow motion speed: 1/32 ⇨ 1/16 ⇨ 1/8 ⇨ 1/4 ⇨ 1/2*
*3 *Search speed: x2 ⇨ x10*
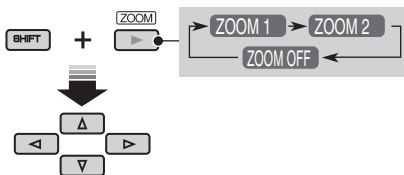*4 *Search speed: ►►1 ⇨ ►►2 ⇨ ►►3*
*5 *Search speed: ►►1 ⇨ ►►2*

### Enlarging the view (Zoom in)

**During moving picture playback...**

**DVD** Video    **DivX**    **MPEG**    **VCD**

SHIFT $+$ $\overset{ZOOM}{\blacktriangleright}$

ZOOM 1 → ZOOM 2 → ZOOM 3 → ZOOM 4
ZOOM OFF ← ZOOM 6 ← ZOOM 5 ←

△
◁    ▷    Move the enlarged portion.
▽

**While pausing...**

**JPEG**

SHIFT $+$ $\overset{ZOOM}{\blacktriangleright}$    ZOOM 1 → ZOOM 2
ZOOM OFF ←

△
◁    ▷
▽

**To cancel zoom,** select "**ZOOM OFF**".

## Operations using the on-screen bar (DVD/VCD/DivX/MPEG1/MPEG2/ JPEG)

These operations are possible on the monitor using the remote controller.
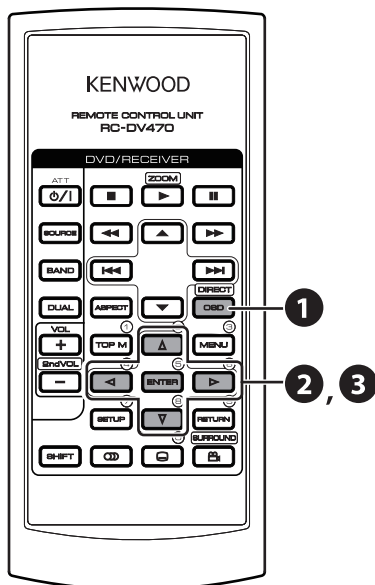
❶ **Display the on-screen bar. (☞ page23)**
    OSD    (twice)

❷ **Select an item.**
    ◁    ▷    ➡    ENTER

❸ **Make a selection.**
    ENTER

    If a pop-up menu appears...

    △    ▽    ➡    ENTER

    • For entering time/numbers...
        ◁    ▷ : Move the entry position
        △    ▽ : Select a number

### To remove the on-screen bar

    OSD

## On-screen bar

| | 1 | 2 | 3 | 4 | 5 | 6 |

Information **DVD-V** | DꙨD 2/0 .0ch | C. RPT | T02-C03 | TOTAL 1:25:58 | ▶

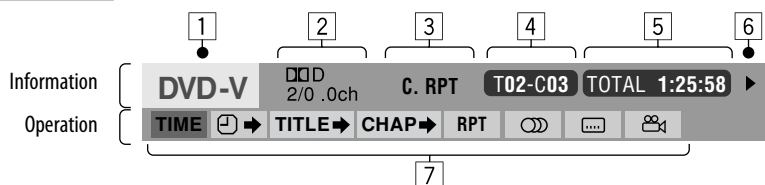Operation | TIME | 🕐➡ | TITLE➡ | CHAP➡ | RPT | ◌◌ | ⬚ | 📷 |

7

Above example is of DVD Video. Items shown on the bar vary due to the disc type.

---

1 Disc type

2 • DVD: Audio signal format
   • VCD: PBC

3 Playback mode*
   DVD Video:
          T. RPT:   Title repeat
          C. RPT:   Chapter repeat
   DivX/MPEG:
          T. RPT:   Track repeat
          F. RPT:   Folder repeat
   JPEG:
          F. RPT:   Folder repeat
   VCD:
          T. RPT:   Track repeat
          D. RND:   Disc random
          T. INT:   Track intro

4 Playback information
   T02-C03   Current title/chapter
   TRACK 01   Current track
   F001-T001   Current folder/track
   F001-F002   Current folder/file

5 Time indication
   TOTAL     Elapsed playing time of the disc
   T. REM     Remaining title time (for DVD)
             Remaining disc time (for others)
   TIME      Elapsed playing time of the current
             chapter/track
   REM       Remaining time of the current
             chapter/track

6 Playback status
   ▶         Play
   ◀◀ / ▶▶  Reverse/forward search
   ◀I / I▶    Reverse/forward slow-motion
   ❚❚       Pause
   ■        Stop

7 Operation icons
   TIME     Change time indication (see 5 )
   🕐➡      Time Search (Specify a certain scene
             by entering time.)
   TITLE➡  Title Search (by its number)
   CHAP➡  Chapter Search (by its number)
   TRACK➡  Track Search (by its number)
   RPT      Repeat play*
   INT       Intro play*
   RND      Random play*
   ◌◌       Change the audio language or audio
             channel
   ⬚        Change the subtitle language
   📷       Change the view angle

English | 23

# *Listening to other external components*

## AV-INPUT

You can connect an external component to the LINE IN/VIDEO IN plugs.

**DISP**: Press if no playback picture appears, but source information (this) screen is displayed.

POWER⇒ON    ❶    Assigned title (☞ page 26)    ☞ page 25

AV-IN                    FLAT

AV-INPUT

3: 45ᴾᴹ
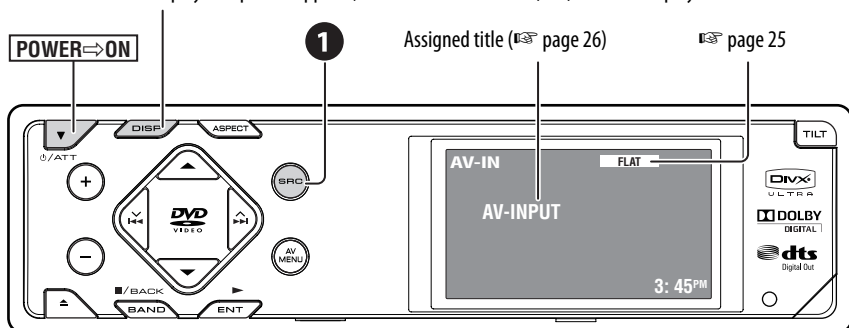
❶ **Select "AV-IN."**

❷ **Turn on the connected component and start playing the source.**

If you select <**Camera Mirror**> for <**AV Input**> (☞ page 32), some status messages such as volume level change will not appear on the monitor while viewing the picture.

# Sound equalization

POWER⇨ON
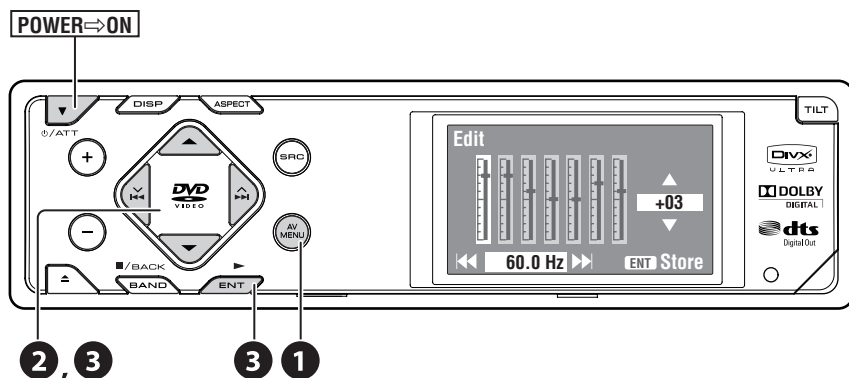


## Selecting sound mode

❶



❷

Equalizer menu icon



❸ Select a sound mode.



- For preset values of each sound mode, ☞ page 39

## Storing your own adjustment

You can store your adjustment into User1, User2, and User3.

**1** Repeat steps ❶ and ❷, then...



**2** Adjust.



**3** Store.



English | 25
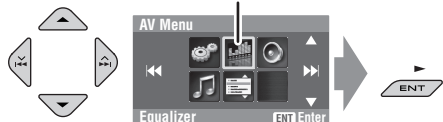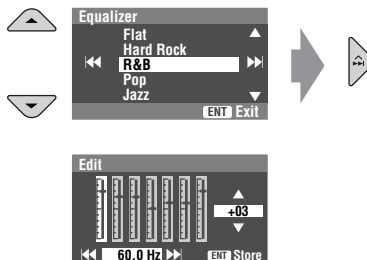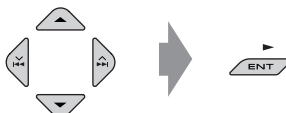
# Assigning titles to the sources

POWER⇨ON

*Press*: Change character set
*Hold*: Erase title

**1**

**Title Entry**
**Station Name**
◄◄ ABC Radio ►►

DISP A→a→0→Á→á   ENT Store

**2** , **4**  **2** , **3**  **2**
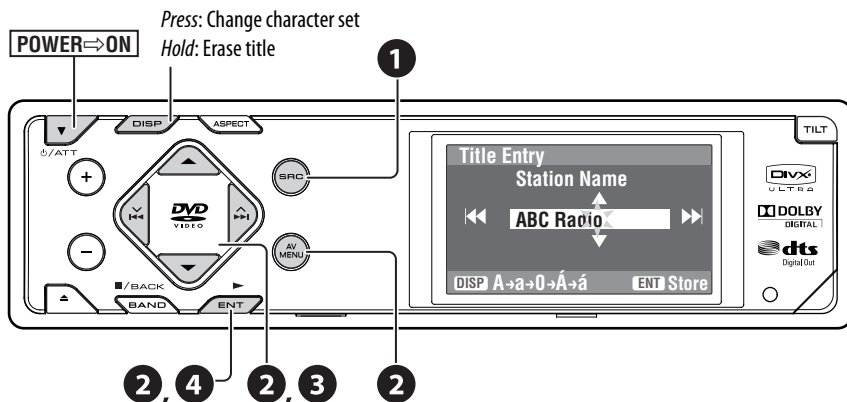
You can assign titles as follows.

| FM/AM stations | Up to 16 characters—up to 30 stations. |
| AV-IN | Up to 16 characters |

• If you try to assign a title to a 31st station, "Name Full" flashes on the monitor. Delete unwanted titles before assignment.

❶ **Select the source.**

• For FM/AM stations: Select the band, then tune into a station.
• For "AV-IN": Select the source.

❷ **Display the title entry screen.**

1

AV MENU

**AV Menu**
Setup   ENT Enter

2

**AV Menu**
Mode   ENT Enter
Mode menu icon

ENT

3

**Mode**
Mono
DX/Local
SSM
◄◄ **Title Entry** ►►
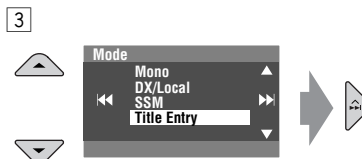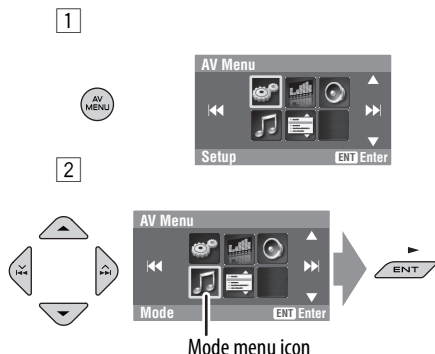
Ex. When you select FM as the source

**Title Entry**
**Station Name**
◄◄ ABC ►►

DISP A→a→0→Á→á   ENT Store
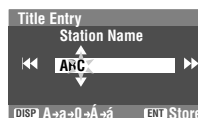
❸ **Assign a title.**

1 Select a character, then move the entering position.
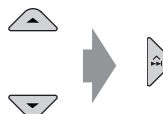
• To change the character set, press **DISP**. (For available characters, ☞ page 38.)
2 Repeat step 1 until you finish entering the title.

❹ **Finish the procedure.**

ENT

# Menu operations



POWER➪ON

Setup  Equalizer  Sound

Mode  List

➋ , ➌ , ➍    ➋ , ➍    ➊

Ex. Changing the <**High Pass Filter**> setting

➊
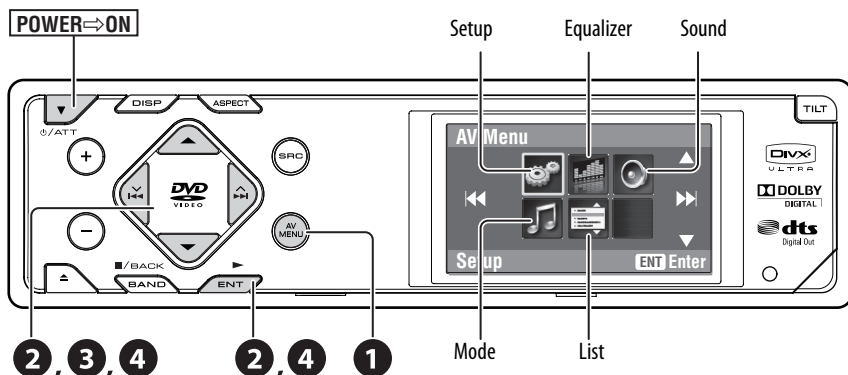
Non-available items will be displayed being shaded.

➋

Sound menu icon

➌
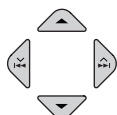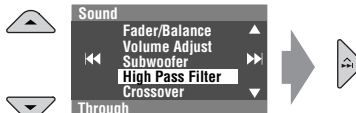
• For some items, repeat this steps to set the sub-items.

➍

---

## ▌Menu items



| | |
|---|---|
| Setup | → ENT → Display |
| Equalizer | Clock |
| Sound | Disc Setup 1 |
| List | Disc Setup 2 |
| Mode | Tuner |
| | Input |
| | Others |
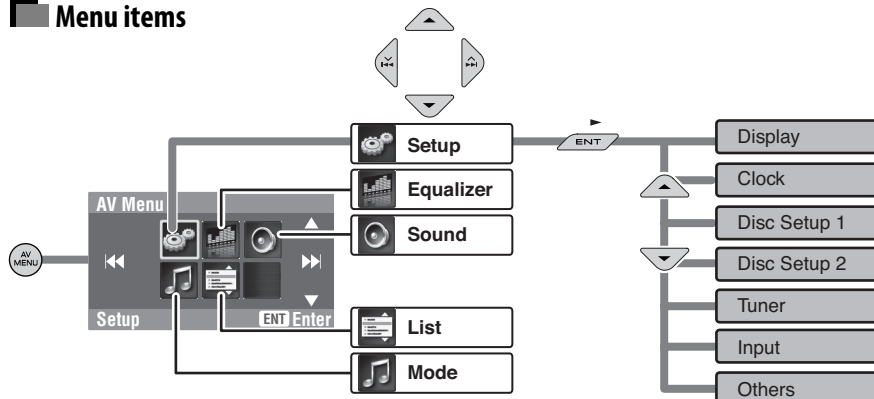
• The display indications may change according to change of the specifications.

### ⚙ Setup

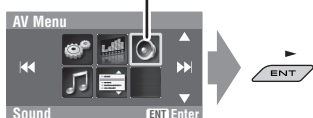| Menu items | Selectable settings, [reference page] |
|---|---|
| **Demonstration** | **Off** : Cancels.<br>**On** : Activates the demonstration on the monitor. |
| **Wall Paper** | You can select the background picture of the monitor. |
| **Scroll** | **Off** : Cancels.<br>**Once** : Scrolls the disc information once.<br>**Auto** : Repeats scrolling (5-second intervals).<br>• Holding **DISP** scrolls the information regardless of this setting. |
| **Tag Display** | **Off** : Cancels.<br>**On** : Shows the Tag data while playing MP3/WMA/WAV tracks. |
| **Dimmer** | **Off** : Cancels.<br>**On** : Activates dimmer.<br>**Auto** : Dims the monitor when you turn on the headlights.[1]<br>**Time Set** : Press **ENT** (or ▶▶I) to display the time setting screen, then set the Dimmer On/Off times. |
| **Bright** | You can adjust brightness of the monitor.<br>**−15** (darkest) to **+15** (brightest); Initial **00** |
| **Picture Adjust**[2] | You can adjust the following to make the monitor clear and legible for watching the playback picture. The setting will be stored separately for "DISC" and "AV-IN".<br>**−15** to **+15**; Initial **0**<br>**Bright** : Adjust if the picture is too bright or too dark.<br>**Contrast** : Adjust the contrast.<br>**Color** : Adjust the color of the picture—lighter or darker.<br>**Tint** : Adjust the tint if the human skin color is unnatural. |

(Display)

[1] *The ILLUMINATION CONTROL lead connection is required. (☞ Installation/Connection Manual)*
[2] *Adjustable only when the source is a disc containing pictures or movies, or "AV-IN".*

| Menu items | Selectable settings, [reference page] | | |
|---|---|---|---|
| **Display** **Aspect**[*3] | You can change the aspect ratio of the picture. | | |
| | | **Aspect ratio of incoming signal** | |
| | | **4:3** | **16:9** |
| | **Full** : For 16:9 original pictures |  |  |
| | **Auto** : | • For "DISC": Aspect ratio is automatically selected to match to the incoming signals. • For the other video sources: Aspect ratio is fixed to <**Regular**>. | |
| | **Regular** : For 4:3 original pictures |  |  |
| **Language**[*4] | Select the indication language shown on the monitor. **English**, **Spanish**, **French**, **German**, **Italian**, **Dutch**, **Swedish**, **Danish**, **Russian** | | |
| **Clock** **Time Set** | Initial **1:00 AM**, ☞ [8] | | |
| **12Hours/24Hours** | **12 Hours**, **24 Hours**, ☞ [8] | | |
| **OSD Clock** | **Off**, **On**, ☞ [8] | | |

*3 *Not adjustable for audio sources.*
*4 *After you change the indication language setting, turn off then on the power so that your setting takes effect.*

| Menu items | Selectable settings, [reference page] |
|---|---|
| **Menu Language** | Select the initial disc menu language; Initial **English** (☞ also page 39). |
| **Audio Language** | Select the initial audio language; Initial **English** (☞ also page 39). |
| **Subtitle** | Select the initial subtitle language or erase the subtitle (<**Off**>); Initial **Off** (☞ also page 39). |
| **OSD Language** | Select the on-screen language used for the external monitor connected to the VIDEO OUT plug; Initial **English**. |
| **Monitor Type**<br><br>16:9   4:3 Letterbox<br><br>4:3 Pan Scan | Select the monitor type to watch a wide screen picture on the external monitor.<br>**16:9** : Select when the aspect ratio of the external monitor is 16:9.<br>**4:3 Letterbox/4:3 Pan Scan** : Select when the aspect ratio of the external monitor is 4:3. Refer to the illustrations on the left to see how the pictures are shown on the monitor. |
| **OSD Position**<br><br>Position 1   Position 2 | Select the position of the on-screen bar, ☞ [23].<br>**1** : Higher position<br>**2** : Lower position |
| **File Type** | Select playback file type when a disc contains different types of files.<br>**Audio** : Plays back audio files.<br>**Still Picture** : Plays back JPEG files.<br>**Video** : Plays back DivX/MPEG1/MPEG2 files. |
| **DivX Regist. (Registration)** | This unit has its own Registration Code. Once you have played back a disc in which the Registration Code recorded, this unit's Registration Code is overwritten for copyright protection. |

*Disc Setup 1* *5

*5  *Selectable only for "DISC" (disc playback pauses).*

| Menu items | Selectable settings, [reference page] |
|---|---|
| **D. Audio Output** | Select the signal format emitted through the DIGITAL OUT (optical) terminals. (☞ also page 38)<br>**PCM Only** : Select this when connecting an amplifier or a decoder incompatible with Dolby Digital, DTS, or MPEG Audio, or connecting to a recording device.<br>**Dolby Digital** : Select this when connecting an amplifier or a decoder compatible with Dolby Digital.<br>**Stream** : Select this when connecting an amplifier or a decoder compatible with Dolby Digital, DTS, or MPEG Audio. |
| **Down Mix** | When playing back a multi-channel disc, this setting affects the signals reproduced through the LINE OUT plugs.<br>**Dolby Surround** : Select this to enjoy multi-channel surround audio by connecting an amplifier compatible with Dolby Surround.<br>**Stereo** : Normally select this. |
| **D. (Dynamic) Range Compres. (Compression)** | You can enjoy a powerful sound at a low volume level while playing Dolby Digital software.<br>**Auto** : Select to apply the effect to multi-channel encoded software.<br>**On** : Select this to always use this function. |
| **IF Band Width** | **Auto** : Increases the tuner selectivity to reduce interference noises between adjacent stations. (Stereo effect may be lost.)<br>**Wide** : Subject to the interference from adjacent stations, but sound quality will not be degraded and the stereo effect will remain. |
| **Area Setting** | **US** : When using in North/Central/South America. FM/AM intervals are set to 200 kHz/10 kHz.<br>**Europe** : When using in any other areas. FM/AM intervals are set to 50 kHz (100 kHz during auto search)/9 kHz.<br>**South America** : When using in South American countries where FM interval is 100 kHz. AM interval is set to 10 kHz. |

Disc Setup 2*[5] — D. Audio Output, Down Mix, D. (Dynamic) Range Compres. (Compression)

Tuner — IF Band Width, Area Setting

*[5] *Selectable only for "DISC" (disc playback pauses).*

| | Menu items | Selectable settings, [reference page] |
|---|---|---|
| **Input** | **AV Input** | You can determine the use of LINE IN and VIDEO IN plugs.<br>**Off** : Select when no component is connected ("AV-IN" is skipped while selecting the source).<br>**Audio&video** : Select when connecting an AV component such as a VCR.<br>**Audio** : Select when connecting an audio component such as a digital audio player.<br>**Camera**[*6]: Select when connecting the rear view camera.<br>**Camera Mirror**[*6]: The mirror image of the rear view is displayed on the monitor. (The monitor on the unit only; the normal rear view appears on the external monitor.) |
| | **External Input** | Keep "Changer" to use. |
| **Others** | **Beep** | **Off** : Cancels.<br>**On** : Activates the key-touch tone. |
| | **Telephone Muting**[*7] | **Off** : Cancels.<br>**Muting1**, **Muting2** : Select either one which mutes the sounds while using the cellular phone. |
| | **Initialize** | Initialize all settings you have made in <**AV Menu**>. Press **ENT**, then reset the unit (☞ page 3). |

[*6] *Reverse lamp lead connection is required. See Installation/Connection Manual (separate volume). The rear view through the camera appears on the monitor in "Full" aspect ratio (regardless of the aspect ratio setting) when you shift the gear to the reverse (R) position.*

[*7] *The TEL MUTING lead connection is required. See Installation/Connection Manual (separate volume).*

## Equalizer

| Menu items | Selectable settings, [reference page] |
| --- | --- |
| **Flat**/Hard Rock/R&B/Pop/Jazz/<br>Dance/Country/Reggae/Classic/<br>User1/User2/User3 | ☞ [25] |

## Sound

| Menu items | Selectable settings, [reference page] |
| --- | --- |
| **Fader/Balance**<br>Adjusts fader<br><br>Adjust balance | Adjust fader—speaker output balance between the front and rear speakers.<br>• Upmost—front only<br>• Downmost—rear only<br>When using a two-speaker system, set the fader to the center (**00**).<br>Adjust balance—speaker output balance between the left and right speakers.<br>• Leftmost—left only<br>• Rightmost—right only |
| **Volume Adjust** | Adjust and store auto-adjustment volume level for each source, comparing to the FM volume level. The volume level will automatically increase or decrease when you change the source.<br>**–12** to **+12**; Initial **00** |
| **Subwoofer** | Adjust the settings below in the submenu:<br>**Phase** : Subwoofer phase. Select either <**Normal**> or <**Reverse**>, which reproduces a better sound.<br>**Level**: Subwoofer output level. Level: **–06** to **+08**; Initial **00** |
| **High Pass Filter** | **Through** : Select when the subwoofer is not connected.<br>**On** : Select when the subwoofer is connected. |
| **Crossover** | Adjust the crossover frequency between the front/rear speakers and the subwoofer.<br>**80Hz**, **120Hz**, **150Hz** |
| **Amplifier Gain** | You can change the maximum volume level of this unit.<br>**Off** : Deactivates the built-in amplifier.<br>**Low Power** : VOL 00 to 30 (Select this if the maximum power of the speakers is less than 50 W)<br>**High Power** : VOL 00 to 50 |

## 🎵 Mode*8

| Menu items | Selectable settings, [reference page] |
| --- | --- |
| Mono | Only for FM. (**Off**, **On**), ☞ [12] |
| DX/Local | Only for FM. (**DX**, **Local**), ☞ [13] |
| SSM | Only for FM. ☞ [13] |
| Title Entry | Only for FM/AM stations, and "AV-IN". ☞ [26] |
| All Off/Intro/Repeat/Random | Only for disc playback. ☞ [18] |

## 📑 List

The accessible lists differ depending on the sources, ☞ [14, 19]

*8 *Items listed under <**Mode**> vary among the playback sources.*

# *More about this unit*

## ◼ General

### Turning on the power

- By pressing SRC (source) on the unit, you can also turn on the power. If the source is ready, playback starts.

## ◼ FM/AM

### Storing stations in memory

- When SSM is over, received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).

## ◼ Disc

### General

- In this manual, words "track" and "file" are interchangeably used.
- This unit can also play back 8 cm (3-3/16") discs.
- This unit can only play back audio CD (CD-DA) files if different type of audio files (MP3/WMA/WAV) are recorded in the same disc.
- This unit can display only one-byte characters. No other characters can be correctly displayed.

### Inserting a disc

- When a disc is inserted upside down, "Cannot play this disc Check the disc" appears on the monitor. Eject the disc.

### Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (Disc playback starts.)

### Changing the source

- If you change the source, playback also stops without ejecting the disc.
  Next time you select "DISC" for the playback source, disc play starts from where it stopped previously.

### Playing Recordable/Rewritable discs

- This unit can recognize a total of 5 000 files and 250 folders (a maximum of 999 files per folder).
- Use only "finalized" discs.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- This unit can recognize a total 25 characters for file/folder names.
- Some discs or files may not be played back due to their characteristics or recording conditions.

## Playing DivX files

- This unit can play back DivX files with the extension code <.divx>, <.div>, <.avi> (regardless of the letter case—upper/lower).
- This unit supports the DivX files whose resolution is 720 x 576 pixels or less.
- This unit supports DivX 6.x, 5.x, 4.x, and 3.11.
- Audio stream should conform to MP3 or Dolby Digital.
- This unit does not support GMC (Global Motion Compression).
- The file encoded in the interlaced scanning mode may not be played back correctly.
- The maximum bit rate for video is 4 Mbps (average).

## Playing MPEG files

- This unit can play back MPEG files with the extension code <.mpg> or <.mpeg>.
- The stream format should conform to MPEG system/program stream.
- The file format should be MP@ML (Main Profile at Main Level)/SP@ML (Simple Profile at Main Level)/MP@LL (Main Profile at Low Level).
- Audio streams should conform to MPEG1 Audio Layer-2.
- The maximum bit rate for video is 4 Mbps (average).

## Playing JPEG files

- This unit can play back JPEG files with the extension code <.jpg> or <.jpeg>.
- It is recommended that you record a file at 640 x 480 resolution.
- This unit can play back baseline JPEG files. Progressive JPEG files or lossless JPEG files cannot be played.

## Playing MP3/WMA/WAV files

- This unit can play back files with the extension code <.mp3>, <.wma>, or <.wav> (regardless of the letter case—upper/lower).
- This unit can play back the files meeting the conditions below:
  – Bit rate: MP3/WMA: 32 kbps —— 320 kbps
  – Sampling frequency:
    48 kHz, 44.1 kHz, 32 kHz (for MPEG1)
    24 kHz, 22.05 kHz, 16 kHz (for MPEG2)
    48 kHz, 44.1 kHz, 32 kHz, 22.05 kHz (for WMA)
    44.1 kHz (for WAV)
- This unit can show ID3 Tag Version 1.0/1.1/2.2/2.3/2.4 (for MP3). This unit can also show WAV Tag and WMA Tag.
- This unit can play back files recorded in VBR (variable bit rate).
  Files recorded in VBR have a discrepancy in elapsed time indication.
- This unit cannot play back the following files:
  – MP3 files encoded with MP3i and MP3 PRO format.
  – MP3 files encoded with Layer 1/2.
  – WMA files encoded with lossless, professional, and voice format.
  – WMA files which are not based upon Windows Media® Audio.
  – WMA files copy-protected with DRM.
  – Files which have the data such as AIFF, ATRAC3, etc.

## Control screen

- The following control screens appear only on the external monitor.

**DivX/MPEG1/MPEG2/JPEG/MP3/WMA/WAV**
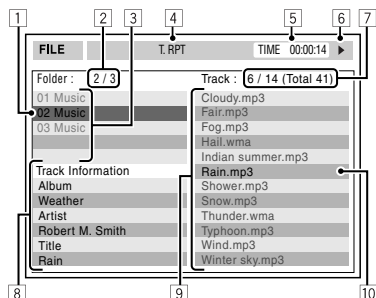


1. Current folder (highlighted bar)
2. Current folder number/total folder number
3. Folder list
4. Selected playback mode
5. Elapsed playing time of the current track (not displayed for JPEG)
6. Operation status
7. Current track number/total number of tracks in the current folder (total number of tracks on the disc)
8. Track information (only for MP3/WMA/WAV)
9. Track list
10. Current track (highlighted)

**CD**
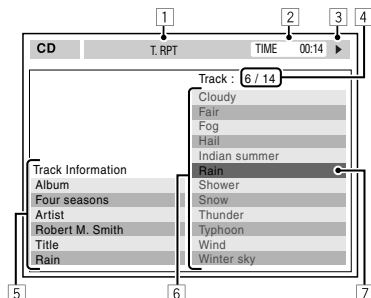


1. Selected playback mode
2. Elapsed playing time of the current track
3. Operation status
4. Current track number/total number of tracks on the disc
5. Track information
6. Track list
7. Current track (highlighted bar)

## ■ Menu settings

- If you change the <**Amplifier Gain**> setting from <**High Power**> to <**Low Power**> while the volume level is set higher than "30", the unit automatically changes the volume level to "VOL 30".
- After you change any of <**Menu Language/Audio Language/Subtitle**> settings, turn off then on the power, and re-insert the disc (or insert another disc) so that your setting takes effect.
- When you select <**16:9**> for a picture whose aspect ratio is 4:3, the picture slightly changes due to the process for converting the picture width.
- Even if <**4:3 Pan Scan**> is selected, the screen size may become <**4:3 Letterbox**> for some discs.

## ◾ Sound signals emitted through the rear terminals

### Through the analog terminals (Speaker out/LINE OUT)

2-channel signal is emitted. When playing multi-channel encoded disc, multi-channel signals are downmixed.
• DTS sound cannot be reproduced.

### Through the DIGITAL OUT terminal

Digital signals (Linear PCM, Dolby Digital, DTS, MPEG Audio) are emitted.
• To reproduce the multi-channel sounds such as Dolby Digital, DTS, and MPEG Audio, connect an amplifier or a decoder compatible with these multi-channel sources to this terminal, and set <**D. Audio Output**> correctly. (☞ page 31)

| Playback disc | D. Audio Output | Output signals | | |
|---|---|---|---|---|
| | | Stream | Dolby Digital | PCM Only |
| **DVD** | 48 kHz, 16/20/24 bits Linear PCM | 48 kHz, 16 bits stereo Linear PCM* | | |
| | 96 kHz, Linear PCM | 48 kHz, 16 bits stereo Linear PCM | | |
| | with **Dolby Digital** | Dolby Digital bitstream | | 48 kHz, 16 bits stereo Linear PCM |
| | with **DTS** | DTS bitstream | | |
| | with **MPEG Audio** | MPEG bitstream | 48 kHz, 16 bits stereo Linear PCM | |
| **Audio CD**, **Video CD** | | 44.1 kHz, 16 bits stereo Linear PCM / 48 kHz, 16 bits stereo Linear PCM | | |
| **Audio CD** with **DTS** | | DTS bitstream | | |
| **DivX** | with **Dolby Digital** | Dolby Digital bitstream | | 48 kHz, 16 bits stereo Linear PCM |
| | with **MPEG Audio** | 32/44.1/48 kHz, 16 bits Linear PCM | | |
| **MPEG1/MPEG2** | | 44.1/48 kHz, 16 bits Linear PCM | | |
| **MP3/WMA** | | 32/44.1/48 kHz, 16 bits Linear PCM | | |
| **WAV** | | 44.1 kHz, 16 bits stereo Linear PCM | | |

\* *Digital signals may be emitted at 20 or 24 bits (at their original bit rate) through the DIGITAL OUT terminal if the discs are not copy-protected.*

## ◾ Characters shown on the monitor

In addition to the roman alphabet (A – Z, a – z), the following characters will be used to show the various information on the monitor.
• You can also use the following characters to assign titles. (☞ page 26).

| Á | À | Â | Ä | Ã |
|---|---|---|---|---|
| Å | Æ | Œ | Č | Ć |
| Ç | É | È | Ê | Ë |
| Ğ | Í | Ì | Î | Ï |
| Ñ | Ó | Ò | Ô | Ö |
| Õ | Ø | Ř | Ŕ | Š |
| Ś | Ş | Ú | Ù | Û |
| Ü | Ý | Ž | Ź | ß |
| Þ | Ŋ | Đ | Ŧ | Ł |
| Ì | Ʊ | ð | space | |

| á | à | â | ä | ã |
|---|---|---|---|---|
| å | æ | œ | č | ć |
| ç | é | è | ê | ë |
| ĕ | ğ | í | ì | î |
| ï | ñ | ň | ń | ó |
| ò | ô | ö | ō | ø |
| ő | ř | ŕ | š | ś |
| ş | ú | ù | û | ü |
| ú | ŵ | ý | ŷ | ž |
| ź | ÿ | þ | ŋ | đ |
| ŧ | ľ | ı | ij | space |

Upper and lower cases

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 5 | 6 | 7 | 8 | 9 |
| ! | ” | # | $ | % |
| & | ' | ( | ) | ＊ |
| + | , | — | . | / |
| : | ; | < | = | > |
| ? | @ | _ | ` | ¡ |
| ¿ | £ | € | α | space |

Numbers and symbols

## ■ Language codes (for DVD/DivX language selection)

| Code | Language | Code | Language | Code | Language | Code | Language | Code | Language |
|------|----------|------|----------|------|----------|------|----------|------|----------|
| AA | Afar | FA | Persian | KL | Greenlandic | OC | Occitan | ST | Sesotho |
| AB | Abkhazian | FI | Finnish | KM | Cambodian | OM | (Afan) Oromo | SU | Sundanese |
| AF | Afrikaans | FJ | Fiji | KN | Kannada | OR | Oriya | SW | Swahili |
| AM | Ameharic | FO | Faroese | KO | Korean (KOR) | PA | Panjabi | TA | Tamil |
| AR | Arabic | FY | Frisian | KS | Kashmiri | PL | Polish | TE | Telugu |
| AS | Assamese | GA | Irish | KU | Kurdish | PS | Pashto, Pushto | TG | Tajik |
| AY | Aymara | GD | Scots Gaelic | KY | Kirghiz | PT | Portuguese | TH | Thai |
| AZ | Azerbaijani | GL | Galician | LA | Latin | QU | Quechua | TI | Tigrinya |
| BA | Bashkir | GN | Guarani | LN | Lingala | RM | Rhaeto-Romance | TK | Turkmen |
| BE | Byelorussian | GU | Gujarati | LO | Laothian | RN | Kirundi | TL | Tagalog |
| BG | Bulgarian | HA | Hausa | LT | Lithuanian | RO | Rumanian | TN | Setswana |
| BH | Bihari | HI | Hindi | LV | Latvian, Lettish | RW | Kinyarwanda | TO | Tonga |
| BI | Bislama | HR | Croatian | MG | Malagasy | SA | Sanskrit | TR | Turkish |
| BN | Bengali, Bangla | HU | Hungarian | MI | Maori | SD | Sindhi | TS | Tsonga |
| BO | Tibetan | HY | Armenian | MK | Macedonian | SG | Sangho | TT | Tatar |
| BR | Breton | IA | Interlingua | ML | Malayalam | SH | Serbo-Croatian | TW | Twi |
| CA | Catalan | IE | Interlingue | MN | Mongolian | SI | Singhalese | UK | Ukrainian |
| CO | Corsican | IK | Inupiak | MO | Moldavian | SK | Slovak | UR | Urdu |
| CS | Czech | IN | Indonesian | MR | Marathi | SL | Slovenian | UZ | Uzbek |
| CY | Welsh | IS | Icelandic | MS | Malay (MAY) | SM | Samoan | VI | Vietnamese |
| DZ | Bhutani | IW | Hebrew | MT | Maltese | SN | Shona | VO | Volapuk |
| EL | Greek | JI | Yiddish | MY | Burmese | SO | Somali | WO | Wolof |
| EO | Esperanto | JW | Javanese | NA | Nauru | SQ | Albanian | XH | Xhosa |
| ET | Estonian | KA | Georgian | NE | Nepali | SR | Serbian | YO | Yoruba |
| EU | Basque | KK | Kazakh | NO | Norwegian | SS | Siswati | ZU | Zulu |

## ■ Preset equalizing values

| Sound mode \ Frequency | 60 Hz | 150 Hz | 400 Hz | 1 kHz | 2.5 kHz | 6.3 kHz | 15 kHz |
|------------------------|-------|--------|--------|-------|---------|---------|--------|
| **Flat** | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| **Hard Rock** | +03 | +03 | +01 | 00 | 00 | +02 | +01 |
| **R&B** | +03 | +02 | +02 | 00 | +01 | +01 | +03 |
| **Pop** | 00 | +02 | 00 | 00 | +01 | +01 | +02 |
| **Jazz** | +03 | +02 | +01 | +01 | +01 | +03 | +02 |
| **Dance** | +04 | +02 | 00 | −02 | −01 | +01 | +01 |
| **Country** | +02 | +01 | 00 | 00 | 00 | +01 | +02 |
| **Reggae** | +03 | 00 | 00 | +01 | +02 | +02 | +03 |
| **Classic** | +02 | +03 | +01 | 00 | 00 | +02 | 00 |
| **User1/2/3** | 00 | 00 | 00 | 00 | 00 | 00 | 00 |

# *Troubleshooting*

What appears to be trouble is not always serious. Check the following points before calling a service center.

| | Symptoms | Remedies/Causes |
|---|---|---|
| **General** | • No sound comes out of the speakers. | • Adjust the volume to the optimum level.<br>• Check the cords and connections.<br>• DTS sound cannot be reproduced through the analog terminals (Speaker out/LINE OUT). |
| | • The monitor is not clear and legible. | Sunshine from the windshield may cause this symptom. Adjust <**Bright**>. (☞ page 28) |
| | • The unit does not work at all. | Reset the unit. (☞ page 3) |
| | • "No Signal" appears. | • Change the source.<br>• Start the playback on the external component connected to VIDEO IN plug.<br>• Check the cords and connections.<br>• Signal input is too weak. |
| **FM/AM** | • SSM automatic presetting does not work. | Store stations manually. (☞ page 14) |
| | • Static noise while listening to the radio. | Connect the antenna firmly. |
| **Disc playback** | • Disc can be neither recognized nor played . | Eject the disc forcibly. (☞ page 3) |
| | • Disc cannot be ejected. | Unlock the disc. (☞ page 19) |
| | • Recordable/Rewritable discs cannot be played back.<br>• Tracks on the Recordable/Rewritable discs cannot be skipped. | • Insert a finalized disc.<br>• Finalize the discs with the component which you used for recording. |
| | • Playback does not start. | • Insert the disc correctly again.<br>• Region code of the DVD is not correct. (☞ page 6)<br>• The format of files is not supported by the unit. |
| | • The playback picture is not clear and legible. | Adjust items in <**Picture Adjust**>. (☞ page 28) |
| | • Sound and pictures are sometimes interrupted or distorted. | • Stop playback while driving on rough roads.<br>• Change the disc. |
| | • No playback picture appears on the monitor. | Parking brake lead is not connected properly. (☞ Installation/Connection Manual) |
| | • No picture appears on the external monitor. | • Connect the video cord correctly.<br>• Select the correct input on the external monitor. |

| | Symptoms | Remedies/Causes |
|---|---|---|
| **MP3/WMA/WAV playback** | • Disc cannot be played back. | • Change the disc.<br>• Record the tracks using a compliant application in the appropriate discs. (☞ page 6)<br>• Add appropriate extension codes to the file names. |
| | • Noise is generated. | The track played back is not a playable file format. Skip to another file. |
| | • Tracks are not played back as you have intended them to play. | Playback order may differs from the one played back using other players. |
| | • Elapsed playing time is not correct. | This sometimes occurs during playback. This is caused by how the tracks are recorded. |
| **AV-IN** | • No picture appears on the monitor. | • Turn on the video component if it is not on.<br>• This unit is not connected to the video component correctly. Connect it correctly. |
| | • The playback picture is not clear and legible. | Adjust items in <**Picture Adjust**>. (☞ page 28) |

# Specifications

<table>
<tr><td rowspan="10" style="writing-mode: vertical">AMPLIFIER</td><td><strong>Power Output:</strong></td><td colspan="2"><strong>20 W RMS × 4 Channels at 4 Ω and ≤ 1% THD+N</strong></td><td rowspan="2">Amplifier Power Standard CEA CEA-2006 Compliant</td></tr>
</table>

| **AMPLIFIER** | **Power Output:** | **20 W RMS × 4 Channels at 4 Ω and ≤ 1% THD+N** | |
|---|---|---|---|
| | Signal-to-Noise Ratio: | 80 dBA (reference: 1 W into 4 Ω) | |
| | Load Impedance: | | 4 Ω (4 Ω to 8 Ω allowance) |
| | Equalizer Control Range: | Frequencies: | 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 15 kHz |
| | | Level: | ±10 dB |
| | Audio Output Level LINE OUT (FRONT/ REAR)/SUBWOOFER: | Line-Out Level/Impedance: | 2.5 V/20 kΩ load (full scale) |
| | | Output Impedance: | 1 kΩ |
| | Color System: | | NTSC |
| | Video Output (composite): | | 1 Vp-p/75 Ω |
| | Other Terminals: | Input: | LINE IN, VIDEO IN, Antenna input |
| | | Output: | VIDEO OUT, DIGITAL OUT (optical) |

| **FM/AM TUNER** | **Frequency Range:** | FM (with channel interval set to 100 kHz or 200 kHz): | 87.5 MHz to 107.9 MHz |
|---|---|---|---|
| | | FM (with channel interval set to 50 kHz): | 87.5 MHz to 108.0 MHz |
| | | AM (with channel interval set to 10 kHz): | 530 kHz to 1 710 kHz |
| | | AM (with channel interval set to 9 kHz): | 531 kHz to 1 602 kHz |
| | FM Tuner | Usable Sensitivity: | 11.3 dBf (1.0 µV/75 Ω) |
| | | 50 dB Quieting Sensitivity: | 16.3 dBf (1.8 µV/75 Ω) |
| | | Alternate Channel Selectivity (400 kHz): | 65 dB |
| | | Frequency Response: | 40 Hz to 15 000 Hz |
| | | Stereo Separation: | 35 dB |
| | AM Tuner | Sensitivity/Selectivity: | 20 µV/35 dB |

| DVD/CD | | | |
|---|---|---|---|
| | Signal Detection System: | Non-contact optical pickup (semiconductor laser) | |
| | Frequency Response: | DVD, fs=48 kHz: | 16 Hz to 22 000 Hz |
| | | DVD, fs=96 kHz: | 16 Hz to 22 000 Hz |
| | | VCD/CD: | 16 Hz to 20 000 Hz |
| | Dynamic Range: | | 93 dB |
| | Signal-to-Noise Ratio: | | 95 dB |
| | Wow and Flutter: | | Less than measurable limit |

| MONITOR | | |
|---|---|---|
| | Screen Size: | 2.7 inch wide liquid crystal display |
| | Number of Pixel: | 123 200 pixels: 560 (horizontal) × 220 (vertical) |
| | Drive Method: | TFT (Thin Film Transistor) active matrix format |
| | Color System: | PAL/NTSC |
| | Aspect Ratio: | 16:9 (wide) |
| | Allowable Storage Temperature: | −10℃ to +60℃ (14°F to 140°F) |
| | Allowable Operating Temperature: | 0℃ to +40℃ (32°F to 104°F) |

| GENERAL | | | |
|---|---|---|---|
| | Power Requirement: | Operating Voltage: | DC 14.4 V (11 V to 16 V allowance) |
| | Grounding System: | | Negative ground |
| | Allowable Operating Temperature: | | 0℃ to +40℃ (32°F to 104°F) |
| | Dimensions (W × H × D): | Installation Size (approx.): | 182 mm × 52 mm × 160 mm (7-3/16″ × 2-1/16″ × 6-5/16″) |
| | | Panel Size (approx.): | 188 mm × 58 mm × 14 mm (7-7/16″ × 2-5/16″ × 5/8″) |
| | Mass (approx.): | | 2.1 kg (4.7 lbs) (excluding accessories) |

*Design and specifications are subject to change without notice.*

If a kit is necessary for your car, consult your telephone directory for the nearest car audio speciality shop.